

# **EXHIBIT 1**

**Amended Report on Updating Voter Registration Records  
with Data from Online Motor Vehicle Transactions**

***Stringer, et al v. Pablos*, No. No. 5:16-cv-00257-OLG  
United States Court for the Western District of Texas**

---

**Eitan D. Hersh  
Assistant Professor  
Department of Political Science  
Yale University  
New Haven, CT**

**May 25, 2017\***

**\*Original Report Filed April 15, 2017**

**I. Statement of Inquiry**

1. I have been asked to assess the capacity of the state of Texas to update voter registration records based on information that Texans provide to the Department of Public Safety (DPS) through an online portal when they renew their drivers' licenses or submit a change of address. When Texans perform these tasks in person at a motor vehicle office, DPS transmits the information to the Secretary of State (SOS) to update voter records. However, when the same tasks are performed online, the voter's new information is not supplied to the SOS. The question is why. It is plausible that there are technical, logistical, political, and legal reasons that Texas does not update its files in this way. As a scholar who studies voter registration systems, I have been asked to review depositions from state officials and offer an assessment of the logistical challenges that may explain Texas's policy decision in this matter.

**II. Background and Qualifications**

2. I am an assistant professor of political science and a resident fellow of the Institution for Social and Policy Studies at Yale University in New Haven, Connecticut. I joined the faculty at Yale in 2011. I received my PhD in government from Harvard University in 2011.
3. The expertise I bring to bear on this case is specifically my familiarity with voter registration systems and my prior work in linking records of drivers licenses to voter registration databases.

4. My scholarly research focuses on the topic of U.S. elections, specifically on voter behavior, election administration, and political campaigns. My methodological focus is in using individual-level data such as digitized voter registration records to study politics. Peer-reviewed articles such as “The Primacy of Race in the Geography of Income-Based Voting” (*American Journal of Political Science*, 2016), “Democratic and Republican Physicians Provide Different Care on Politicized Health Issues” (*Proceedings of the National Academy of Sciences*, 2016), “The Dynamic Election: Patterns of Early Voting Across Time, State, Party, and Age,” (*Election Law Journal*, 2016), “Movers, Stayers, and Registration: Why Age is Correlated with Registration in the US” (*Quarterly Journal of Political Science*, 2012), and others all utilize voter registration records to study politics. In addition, I have written about the quality of records in state voter systems (“Voter Registration: The Process and Quality of Lists,” in *The Measure of American Elections*, 2014) and the use of voter registration databases in campaign politics (*Hacking the Electorate*, 2015).
5. I have been deposed as an expert witness in *Judicial Watch, et al. v. King, et al.*, an NVRA case involving the state of Indiana. I have also been deposed in *Fish v. Kobach*, a voter registration case currently underway in Kansas. I have also served as an expert consultant in *Texas v. Holder* and *Veasey v. Perry*, two cases involving a voter identification law in the state of Texas.
6. I am compensated for my work at a rate of \$200 per hour.
7. A copy of my current CV is attached as Exhibit A to this Report.
8. A list of the materials I reviewed is attached as Exhibit B to this Report.

9. A list of my non-academic published writing in addition to the publications listed in my CV that I've published in the previous 10 years is attached as Exhibit C to this Report.

### **III. Policy Landscape**

10. With the widespread adoption of the Internet, governments are increasingly moving services online that had previously been available only in person or by mail. For instance, according to the National Conference of State Legislatures, all but twelve states already have online voter registration or are in the process of implementing such a policy. In eleven of the 38 states with online registration, the policy was adopted without any legislation, but simply as a technological upgrade to an existing government function.<sup>1</sup>
11. The trend to online services is, of course, not unique to voter registration. For instance, in complying with the Truth in Mileage Act, a federal statute that requires the collection of a signature on an odometer disclosure form, the state of Texas petitioned the federal government to substitute the signature requirement and allow for an online transaction without a signature. The state asked the federal government to allow individuals to authenticate their identity by providing personal information. The state "assert[ed] that its proposal provides a level of security equivalent to that of

---

<sup>1</sup> "Online Voter Registration," National Conference of State Legislatures," January 31, 2017. Accessed March 27, 2017. <http://www.ncsl.org/research/elections-and-campaigns/electronic-or-online-voter-registration.aspx>

an existing disclosure on secure paper titles and that on-line identity authentication acts in lieu of an actual signature on the title.”<sup>2</sup>

12. Citizens are also increasingly interacting online with state agencies such as the Departments of Motor Vehicles (DMV) and assistance agencies. When states shift to online transactions, they may choose to authenticate an individual’s identity by asking the person to report information like their driver’s license number and part of their social security as an alternative to signatures. For example, the state of Texas allows this alternative form of authentication when residents conduct certain transactions on Texas.gov, like renewing licenses online through the Department of Public Safety.<sup>3</sup> Erin Hutchins, general manager and director of portal operations for Texas NIC, explained the online authentication system used for DPS transactions, whereby a user enters in personal information, and then “Texas.gov sends a real-time authentication and eligibility request to DPS and DPS, essentially, sends back a real-time yes or no.”<sup>4</sup>

13. In other settings, Texas.gov authenticates online users not through a real-time process, but through regularly-updated extract files containing personal data that state agencies share with NIC, the Texas.gov vendor. For example, the Department of State Health Services uses this Texas Online Authentication System (TOAS) to allow users to authenticate and request their vital records (Hutchins deposition p. 26:7-28:9).

---

<sup>2</sup> See U.S. Department of Transportation, National Highway Traffic Safety Administration, 49 CFR Part 580, Docket No. NHTSA 2009 0174 Notice 2. Federal Register, Volume 75, No., 77, Thursday April 22, 2010. <https://www.gpo.gov/fdsys/pkg/FR-2010-04-22/pdf/2010-8320.pdf>.

<sup>3</sup> See Section 2054.271 of Texas Government Code. See also “TexasOnline 2.0 Customer Agreement between the State of Texas, acting by and through the Texas Department of Information Resources and Texs NICUSA LLC, <http://publishingext.dir.texas.gov/portal/internal/contracts-and-services/Contracts/DIR-SDD-1075-Attachment-R-1-Form-of-Customer-Agreement.pdf>

<sup>4</sup> See Deposition of Erin Hutchins, March 31, 2017, Page 31: 14-16.

Both the TOAS process and the DPS real-time process enable Texans to perform online functions by authenticating their identity by filling in a series of personal data fields in lieu of a signature.

14. According to the National Voter Registration Act (NVRA), state agencies like DMVs are required to incorporate voter registration into their services. When these agencies move to online transactions, they may fail to comply with the NVRA by not incorporating voter registration seamlessly into their online systems.<sup>5</sup> As the bipartisan Presidential Commission on Election Administration noted in its 2014 report, agencies that are required under the NVRA to offer opportunities for citizens to register to vote violate the NVRA when they offer services online but “voter registration is left out of the online portals and website designs of these agencies.”<sup>6</sup> However, as I describe, some states have found straightforward solutions to comply with the law online.

15. The technology clearly exists for state motor vehicle authorities that allow online transactions (e.g. renewals and changes of address) to share the user’s updated information with the election administration in an automated fashion. For instance, when a resident of California uses the state’s online system to submit an address change, a message states, “You may authorize DMV to notify the Secretary of State of a voter change of address if you are already registered to vote.”<sup>7</sup>

---

<sup>5</sup> The NVRA references State motor vehicle authorities. While some states administer driver licenses through DMVs, Texas administers its driver licenses through the Department of Public Safety.

<sup>6</sup> See Robert F. Bauer and Benjamin L. Ginsberg, co-chairs, “The American Voting Experience: Report and Recommendations of the Presidential Commission on Election Administration,” January 2014. <https://law.stanford.edu/publications/the-american-voting-experience-report-and-recommendations-of-the-presidential-commission-on-election-administration/>

<sup>7</sup> State of California, Department of Motor Vehicles, Change of Address System. Accessed March 27, 2017. <https://www.dmv.ca.gov/portal/dmv/detail/online/coa/welcome>

16. Even states that, like Texas, do not offer online voter registration, comply with NVRA requirements in online transactions. In Michigan, for example, the state website explains:

When you move, you must change the address on your driver's license as soon as possible. A change of address may be submitted at a Secretary of State office, online through ExpressSOS or by mail using the change-of-address form. By changing the address on your driver's license, all driver, vehicle and voter registration files in your Secretary of State Record will be updated with your new address.<sup>8</sup>

In North Carolina, another state that, like Texas, does not offer voter registration online, a similar process is used and explained to citizens. When a citizen of North Carolina navigates to the online DMV system for license renewal, a message states, “You can use this service to submit voter registration information, which DMV will send to state elections officials.”<sup>9</sup>

#### **A. Texas System of Online Transactions**

17. The Texas DPS’s system for online transactions is different from these examples above. But before describing how Texas processes online transactions, it is useful to examine how Texas incorporates voter registration into its in-person motor vehicle transactions. When an individual changes their address or renews their license in person, they fill out a physical form and give the form to a customer service representative who inputs the information into the computer system. One question on the form asks, “If you are a US citizen, would you like to register to vote? If

---

<sup>8</sup> State of Michigan, Address Change on a Registration, Accessed March 27, 2017, [http://www.michigan.gov/sos/0,4670,7-127-1585\\_1587\\_1590-25230--,00.html](http://www.michigan.gov/sos/0,4670,7-127-1585_1587_1590-25230--,00.html)

<sup>9</sup> North Carolina Division of Motor Vehicles, “Login to Renew Your Driver License,” Accessed March 27, 2017 <https://edmv.ncdot.gov/DriverLicenseRenewal>



- registered, would you like to update your voter information?” If the person responds affirmatively, DPS electronically transmits the individual’s personal information to the Secretary of State’s office. No further action is required by the registrant.
18. The Department of Public Safety shares information with SOS in two files. In the daily update file, DPS informs the SOS of any new record or any change to existing records. In the daily voter registration file, DPS informs the SOS of information of new registrations or updated address information for changed addresses. In other words, for in-person transactions, DPS informs the SOS when personal data in its file has been added or changed (daily update file) and also informs DPS of *new* voter registrations or changes in personal data such as an updated address (voter registration file).
19. Now consider Texas’s online procedure. When citizens of Texas renew their license online or process a change of address, they are presented with the option to select Yes or No in response to a prompt stating, “I want to register to vote.” But they are told that “selecting Yes does not register you to vote.” Instead of DPS sharing the voter’s information with the election administration, as other states do and as Texas does for in-person and mail transactions, the Texas online portal directs the user to an external website where he or she can download an unpopulated registration application and mail it to the election office themselves.
20. Texas’s online process seems incongruent with the language of Section 5 of the NVRA entitled “Simultaneous Application for Voter Registration and Application for Motor Vehicle Driver’s License,” which requires that each driver’s license

application serves as an application for voter registration.<sup>10</sup> The statute explains that “the voter registration application portion of an application for a State motor vehicle license may not require any information that duplicates information required in the driver’s license portion of the form.” The statute further states that “Any change of address form submitted in accordance with State law for purposes of a State motor vehicle driver’s license shall serve as a notification of change of address for voter registration.” Texas does not appear to comply with the statute when customers complete transactions online. Moreover, the process has generated confusion among Texans, with hundreds or thousands of inquiries or complaints recorded with DPS.<sup>11</sup>

21. Even though the Texas DPS does not share information with the SOS about a voter’s new address, the DPS does inform election officials on a nightly basis that voters are no longer at their old address (if they registered a change of address). By obtaining daily information that an old address may no longer be valid for a voter, election officials may be able to gain insight into obsolete records on the voter rolls, which in turn they may purge. By not similarly obtaining information through a daily transaction about new addresses, election officials are less likely to learn about a current registrant’s new address.

22. Importantly, DPS prefers eligible license holders to use the online portal rather than come into a DPS branch office. As DPS representative Sheri Gipson notes, use of the online system “reduces traffic within the office and reduces overall wait times.”<sup>12</sup>

DPS promotes the use of its online system through online advertisements. Use of

---

<sup>10</sup> 52 U.S.C. § 20504

<sup>11</sup> See Deposition of Sheri Gipson, January 31, 2017, pp. 290-293. See also Exhibit C, page 7, of Case 5:16-cv-00257-OLG, Document 1-4, Filed March 14, 2016.

<sup>12</sup> See 30(b)(6) deposition of Sheri Gipson, March 7, 2017, p. 96:20-25. See also Exhibit Y to 30(b)(6) deposition of Sheri Gipson.

online transactions is also likely to increase. According to Ms. Gipson, there are two to three times as many transactions now than just a few years ago. Currently, only about 30% of eligible license-holders are utilizing the online system. It is reasonable to expect, particularly with DPS's deliberate advertising campaign, that use of the online system will increase.<sup>13</sup>

#### **IV. Reasons Why DPS does not Transmit Certain Data from Online Transactions to SOS**

##### **A. Technical challenges do not prevent DPS from transmitting data to SOS**

23. There are a number of reasons why interactions between the online DPS system and SOS might, theoretically, differ from the offline system. One could imagine a number of reasons a state might argue that it is burdensome to transfer voter registration information to SOS in the same manner online as it does in person. For example, it is conceivable that a state could exclusively rely on a paper-record transfer for interactions between a state motor vehicle authority and an election office that would not be easy to adapt to an online record. As another example, it is conceivable that personal identifiers necessary to link DPS records to SOS records are not the same in online and offline systems or that the systems are incompatible. If there were technical obstacles like these, there would likely be an added financial cost associated with transferring records from an online system. Thus, a state may argue that costs present a challenge.

24. However, in reviewing depositions by John Crawford, manager of license services application for DPS and by Sheri Gipson, Deputy Assistant Director of Headquarters Operations at DPS, it is apparent that in the case of Texas there are not obvious

---

<sup>13</sup> See Deposition of Sheri Gipson, January 31, 2017, pp. 288:12-289:23.

technical challenges (except for one as described below) that prevent DPS from sharing registration updates with SOS. All that is required is for DPS to obtain information from Texas.gov's vendor, NIC and to send it to SOS. Customers already submit a response on Texas.gov indicating whether they would like to register to vote. NIC could then transmit data to DPS of individuals who request the updates to their voter record. Once DPS has this information, it could transmit updated registration information to SOS just as it processes the information when it comes via in-person transactions.

25. Ms. Gipson, in her 30(b)(6) deposition, confirmed that DPS could inform NIC that DPS would like to receive the information about whether an individual requested to update their voter registration information (p.207:1-18). In his deposition, Mr. Crawford confirmed that DPS could store the information (p. 92:14-19). In her deposition, Erin Hutchins, of Texas NIC, also confirmed that there is no technical obstacle to NIC transmitting the information to DPS (p.120:21-121:3). It is already clear that DPS has the capability of transmitting updates electronically on a daily basis to election officials. Thus, the basis of the decision not to send registration updates from online transactions is a policy decision based on an interpretation of statute rather a logistical decision based on technical capacity. Because the technical capacity is already in place, it does not appear the cost would be significant. In principle, online transmission of registration updates should be a cost savings for election officials. Consider that under the current system, many individuals who change their address online through the Texas.gov portal must separately update their voter registration record through an application that must be keyed into a computer

system by an election official. The costs savings of automation is the most important reason why governments and industry have moved to automation for so many functions. Automation would almost surely save time and money for Texas state and county officials in this context.

### **B. Electronic Transmission of Signatures is Feasible in Texas**

26. SOS claims one plausible technical hurdle with respect to being able to accept new or amended voter registration records that originate from an online portal. Mr. Keith Ingram, Texas Director of Elections, argued that a voter registration application was required to be signed.<sup>14</sup> In the online system currently used by the state, no digital signature is obtained from a user. Instead, users authenticate their identity by entering in personal information such as part of their social security number and identifiers listed on their drivers' licenses.

27. While the state argues that it cannot comply with the signature requirement in its online system, the Secretary of State does process voter registration applications without obtaining signature information in other settings, such as the case of change-of-address applications submitted to DPS via mail. When an individual submits change of address information by mail, they sign the change-of-address form. However, when the form is processed by DPS, DPS transmits to SOS *a previously-obtained digital signature* that has been stored on file. Because all license holders have performed an in-person transaction (e.g. to obtain their original license), DPS has signatures for all license holders on file. When an individual changes their address by mail, DPS transmits the old electronic signature on file. This process has been described in depositions by DPS's John Crawford and Sheri Gipson and has also

---

<sup>14</sup> Deposition of Keith Ingram, March 22, 2017, p. 102:15-24.

- been acknowledged by Betsy Schonhoff, the voter registration manager for the Secretary of State. In fact, Mr. Crawford notes that the Secretary of State's office would not necessarily know if a signature transmitted from DPS was signed concurrently when the registration information was updated (as in an in-person transaction) or signed in years prior (as in a by-mail transaction) (p.102:24-103:6).
28. Texas' differential treatment of mail transactions and online transactions is not the result of a technical hurdle. Texas clearly admits previously-recorded digital signatures as valid signatures for voter registration applications that come through mail change-of-address forms to DPS, but Texas does not admit previously-recorded digital signatures as valid signatures for online transactions. According to depositions, the state is technically able to a.) determine whether a user who is submitting an online renewal or change-of-address process would like to update registration information, b.) transmit the updates to SOS as part of its daily registration file, and c.) pass on to SOS a previously recorded digital signature that it has on file. Again, the state's decision not to perform this function for online transactions appears to be the result of a policy decision rather than a technical limitation.
29. Moreover, the policy decision in this context is different from the state's position on online authentication for state purposes, as in the case of the policy to use TOAS authentication for non-DPS transactions (see again Texas Government Code 2054.271) and to use a real-time authentication for DPS transactions. As Judge Garcia notes in his March 31, 2017 order, "defendants deemed these [online authentication] submissions sufficient to update drivers' license information – transactions that state law also requires to be verified by an applicant's signature (p. 15)." The state's

policy decision is also inconsistent with the state's position on online authentication for federal purposes, as in the case of Texas's compliance with the Truth in Mileage Act as reported above.

30. Signatures can be used as a form of authentication, to ensure that an individual is not presenting themselves as a different person. However, authentication does not seem to be the purpose of signatures in DPS. For instance, when a new digital signature is captured in an in-person transaction, DPS does not appear to use signature verification or matching software to determine if the captured signature matches a previous signature. Additionally, DPS processes online transactions without signatures. As mentioned above, the Secretary of State also processes transactions without concurrent signatures as well, so long as it has a signature on file.

31. SOS receives from DPS an electronic signature for all registrants including those who originally registered in person at a DPS office. County election officials can then access the information to generate a voter registration form using the information on file, including the electronic signature (Ingram depo p. 47:16-48:12). The county can use this signature if it is deemed necessary to compare with a voter's signature obtained at the polls. As Judge Garcia notes in his order, "It is unclear why an additional signature provided with a change of address form is necessary to enable comparison between the signature provided at the time of initial registration and the signature provided at the polls. (p. 16)." Indeed, Texas SOS does not make use of an additional signature in the case of mail forms or in-county online forms.

### **32. Conclusion**

33. Based on my reading of the testimony cited above, it does not seem that there are substantial technical (and therefore financial) barriers to DPS transmitting registration information to the SOS from online transactions. In fact, automation in this setting, as in other domains, would likely generate cost savings. DPS could comply with the NVRA when customers transact online by simply instructing Texas.gov to collect the answer to the voter registration question and then transmitting such information along with a previously captured digital signature to SOS. In short, Texas could choose to treat the online response to the voter registration question in the same manner it treats the in-person response. Such a transmission from DPS to SOS would be consistent with how DPS currently transmits information from mail-in change of address forms. Furthermore, DPS already transmits digital signatures, even when a customer registers to vote during a driver license transaction at a DPS office. The reason that DPS does not transmit information from online transactions does not appear to be primarily about signatures, costs, or about other technical hurdles, but rather it is based on the established policy for how DPS, in conjunction with SOS, interprets the Texas election statute and the National Voter Registration Act. In my view, Texas' policy for not incorporating voter registration updates into its online DPS transactions is inconsistent with the language of the NVRA.

I reserve the right to amend my report as discovery is not yet complete.

DATED this 15th Day of April, 2017



A handwritten signature in black ink, appearing to read "Eitan Hersch". The signature is stylized with a large, looped "H" and a distinct "E".

---

Eitan Hersch

## Eitan D. Hersh

---

Department of Political Science  
Yale University  
77 Prospect Street, Room C120  
New Haven, CT 06511  
Tel: 203-436-9061  
Email: eitan.hersh@yale.edu  
Web: www.eitanhersh.com

- EMPLOYMENT** Assistant Professor, Political Science  
Resident Fellow, Institution for Social and Policy Studies  
Yale University, 2011-Present
- EDUCATION** Ph.D. in Political Science, Harvard University (2011)  
M.A. in Political Science, Harvard University (2010)  
B.A. in Philosophy, Tufts University, *summa cum laude* (2005)
- BOOK** Eitan Hersh. 2015. *Hacking the Electorate: How Campaigns Perceive Voters*.  
Cambridge: Cambridge University Press.  
— **Winner**, Best Book in Information, Technology, and Politics, APSA 2016
- ARTICLES** Eitan Hersh and Matthew Goldenberg. 2016. “Democratic and Republican Physicians Provide Different Care on Politicized Health Issues,” *Proceedings of the National Academy of Sciences*. 113 (42): 11811-11816.
- Vivekinan Ashok, Daniel Feder, Mary McGrath, and Eitan Hersh. Forthcoming. “Dynamic Voting in a Dynamic Campaign: Three Theories of Early Voting,” *Election Law Journal*.
- Ryan Enos and Eitan Hersh. Forthcoming. “Campaign Perceptions of Electoral Closeness: Uncertainty, Fear, and Over-Confidence,” *British Journal of Political Science*.
- Eitan Hersh and Clayton Nall. 2016. “The Primacy of Race in the Geography of Income-Based Voting: New Evidence from Public Voting Records,” *American Journal of Political Science*. 60 (2): 289-303.  
— **Winner**, Pi Sigma Alpha award for best paper presented at MPSA (2013)  
— **Winner**, MPSA Emerging Scholar award (2013)
- Ryan Enos and Eitan Hersh. 2015. “Party Activists as Campaign Advertisers: The Ground Campaign as a Principal-Agent Problem,” *American Political Science Review*. 109 (2): 252-278.
- Stephen Ansolabehere and Eitan Hersh. 2013. “Gender, Race, Age and Voting: A Research Note,” *Politics and Governance*. 1 (2): 132-137.
- Eitan Hersh. 2013. “The Long-Term Effect of September 11 on the Political Be-

havior of Victims' Families and Neighbors." *Proceedings of the National Academy of Sciences*. 110 (52): 20959-20963.

Eitan Hersh and Brian F. Schaffner. 2013. "Targeted Campaign Appeals and the Value of Ambiguity." *Journal of Politics*. 75 (2): 520-534.

Stephen Ansolabehere and Eitan Hersh. 2012. "Validation: What Big Data Reveal About Survey Misreporting and the Real Electorate." *Political Analysis* 20(4): 437-459.

Stephen Ansolabehere, Eitan Hersh, and Kenneth Shepsle. 2012. "Movers, Stayers, and Registration: Why Age is Correlated with Registration in the U.S." *Quarterly Journal of Political Science* 7(4): 333-363.

Eitan Hersh. 2012. "Primary Voters Versus Caucus Goers and the Peripheral Motivations of Political Participation." *Political Behavior*. 34(4): 689-718.

Bernard Fraga and Eitan Hersh. 2011. "Voting Costs and Voter Turnout in Competitive Elections." *Quarterly Journal of Political Science* 5(4): 339-356.

#### **WORKS IN PROGRESS & UNDER REVIEW**

*Poli-Hobbyism: A Theory of Mass Politics*

"The Political Engagement, Representation, and Leadership of U.S. Clergy" (co-authored with Gabrielle Malina)

"Post-Materialist Particularism: What Petitions Can Tell Us about Biases in the American Policy Agenda" (co-authored with Brian Schaffner)

"Why is There So Much Competition in U.S. Elections?" (co-authored with Bernard Fraga)

"Mixed-Partisan Households and Electoral Participation in the United States" (co-authored with Yair Ghitza)

#### **OTHER WRITING**

Justin Grimmer, Brian Feinstein, Eitan Hersh, and Daniel Carpenter, "Are Close Elections Random?" Working Paper.

Stephen Ansolabehere and Eitan Hersh. 2014. "Voter Registration: The Process and Quality of Lists." In *The Measure of American Elections*, eds. Barry C. Burden and Charles Stewart III. Cambridge: Cambridge University Press.

Stephen Ansolabehere and Eitan Hersh. 2011. "Who *Really* Votes?" In *Facing the Challenge of Democracy*, eds. Paul M. Sniderman and Benjamin Highton. Princeton: Princeton University Press.

Stephen Ansolabehere, David Doherty, Eitan Hersh, and Alan Gerber, "Voter Registration List Quality Pilot Studies," Caltech/MIT Voting Technology Project Report, June 8, 2010.

Eitan Hersh, "A Caucus-Goer's Community," *Reuters*. January 3, 2012.

Eitan Hersh, “What Makes Field Organizers Effective? Being Like the People They Want to Persuade,” Monkey Cage, *Washington Post*, May 21, 2015.

Eitan Hersh, “Data Availability Determines Whether Campaigns Focus on the Middle or the Base,” *FiveThirtyEight*, August 10, 2015.

Eitan Hersh, “How Democrats Suppress the Vote” *FiveThirtyEight*, November 3, 2015.

Eitan Hersh, “With Trump in the Race, The Battleground is Everywhere.” *FiveThirtyEight*, June 21, 2016.

Eitan Hersh, “How Many Republicans Marry Democrats?” *FiveThirtyEight*, June 28, 2016.

Eitan Hersh, “What the Yankees-Red Sox Rivalry Can Teach Us about Political Polarization,” *FiveThirtyEight*, August 11, 2016.

Eitan Hersh, “The GOP’s Jewish Donors are Abandoning Trump,” *FiveThirtyEight*, September 21, 2016.

Eitan Hersh, “The Most Dangerous Hobby,” *Boston Globe*, May 3, 2016.

#### **TEACHING**

PLSC 232: “Information, Technology, and Politics” (Yale)  
 PLSC 229: “Election Rules and Campaign Strategy” (Yale)  
 PLSC 217/853: “U.S. National Elections” (Yale)

#### **REFeree SERVICE**

*American Journal of Political Science* *American Political Science Review*, *American Politics Research*, *British Journal of Political Science*, *Economics and Politics* *Election Law Journal*, *Electoral Studies*, *International Journal of Public Opinion Research*, *Journal of Politics*, *Journal of Urban Affairs* *Legislative Studies Quarterly*, *Political Analysis*, *Political Behavior*, *Political Psychology*, *Political Research Quarterly*, *Political Science Research and Methods*, *Politics and Governance*, *Public Opinion Quarterly*, *Research and Politics*, *Review of Economics and Statistics*, *State Politics and Policy Quarterly*.

#### **INVITED TALKS**

I have given presentations at annual meetings of the American Political Science Association, Midwest Political Science Association, and Society for Political Methodology.

I have given invited talks at Boston University, Columbia, Dartmouth, Harvard, Harvard Kennedy School, Harvard Medical School, MIT, NYU, UCLA, University of Massachusetts-Amherst, Michigan, UNC, UPenn Annenberg School, Princeton, Stanford, Stanford Law School, Washington University-St. Louis, and Yale Law School.

#### **CONSULTING**

Statistical Consultant, *Texas v. Holder* (Voter ID case)  
 Statistical Consultant, *Veasey v. Perry* (Voter ID case)  
 Expert, *Judicial Watch, et al v. King, et al*, (Indiana Voter Registration Case)  
 Commissioner, Commission on Youth Voting and Civic Knowledge, CIRCLE, 2012-14

**Exhibit B**

**Provided by Plaintiffs**

1. Plaintiffs' Original Complaint and Accompanying Exhibits A-E (Dkt. 1)
2. Defendants' Motion to Dismiss for Failure to State a Claim (Dkt. 7)
3. Plaintiffs' Response in Opposition to Defendants' Motion to Dismiss (Dkt. 9)
4. "DPS Overview," Bates Numbers D\_00006204 - D\_00006212
5. "DLS Use Case Specification: Create Daily Update File for SOS," Bates Numbers D\_00009820 - D\_00009831
6. "DLS Use Case Specification: Create Voter Registration Extract File," Bates Numbers D\_00014446 – D\_00014460
7. "National Voter Registration Act and Voter Registration Applications" powerpoint, Bates Numbers D\_00007708 – D\_00007725
8. "Texas.gov Authentication Business Requirements Document EZ, November 12, 2004," Bates Numbers NIC\_005850
9. "Gipson Depo Recap" prepared by Plaintiffs' Counsel Cassandra Champion on 2/1/17
10. Certified Deposition Transcript of Sheri Gipson taken on Jan. 31, 2017
11. Certified Deposition Transcript of John Crawford taken on Feb. 17, 2017
12. Certified Deposition Transcript of Rebekah Hibbs taken on Feb. 24, 2017 (full and condensed formats)
13. Certified Deposition Transcript of Betsy Schonhoff taken on Feb. 27, 2017 (full and condensed formats)
14. Certified Deposition Transcript of Sheri Gipson as DPS representative taken on March 7, 2017 (full and condensed formats) and Exhibit 3Y.
15. Rough Draft Deposition Transcript of Erin Hutchins as NIC representative taken on March 31, 2017
16. Certified Deposition Transcript of Keith Ingram as SOS representative taken on March 22, 2017
17. U.S. Department of Transportation, National Highway Traffic Safety Administration, 49 CFR Part 580, Docket No. NHTSA 2009 0174 Notice 2. Federal Register, Volume 75, No., 77, Thursday April 22, 2010. <https://www.gpo.gov/fdsys/pkg/FR-2010-04-22/pdf/2010-8320.pdf>.
18. Section 2054 of Texas Government Code.
19. TexasOnline 2.0 Customer Agreement between the State of Texas, acting by and through the Texas Department of Information Resources and Texas NICUSA LLC, <http://publishingext.dir.texas.gov/portal/internal/contracts-and-services/Contracts/DIR-SDD-1075-Attachment-R-1-Form-of-Customer-Agreement.pdf>

**Accessed Independently**

1. "Online Voter Registration," National Conference of State Legislatures," January 31, 2017. Accessed March 27, 2017. <http://www.ncsl.org/research/elections-and-campaigns/electronic-or-online-voter-registration.aspx>

2. Robert F. Bauer and Benjamin L. Ginsberg, co-chairs, “The American Voting Experience: Report and Recommendations of the Presidential Commission on Election Administration,” January 2014. <https://law.stanford.edu/publications/the-american-voting-experience-report-and-recommendations-of-the-presidential-commission-on-election-administration/>
3. State of California, Department of Motor Vehicles, Change of Address System. Accessed March 27, 2017. <https://www.dmv.ca.gov/portal/dmv/detail/online/coa/welcome>
4. State of Michigan, Address Change on a Registration, Accessed March 27, 2017, [http://www.michigan.gov/sos/0,4670,7-127-1585\\_1587\\_1590-25230--,00.html](http://www.michigan.gov/sos/0,4670,7-127-1585_1587_1590-25230--,00.html)
5. North Carolina Division of Motor Vehicles, “Login to Renew Your Driver License,” Accessed March 27, 2017 <https://edmv.ncdot.gov/DriverLicenseRenewal>

**Exhibit C**

Additional Non-academic Published Work

“Galvin’s low energy dampens voting innovations,” Commonwealth Magazine, April 11, 2016.

<https://commonwealthmagazine.org/politics/galvins-low-energy-dampens-voting-innovation/>

“Hersh-Galvin: Round 2,” Commonwealth Magazine, May 18, 2016.

<https://commonwealthmagazine.org/politics/hersh-galvin-round-2/>

UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF TEXAS  
SAN ANTONIO DIVISION

JARROD STRINGER, et al.,	§	
Plaintiffs,	§	
	§	
v.	§	C.A. 5:16-cv-00257-OLG
	§	
ROLANDO PABLOS, IN HIS OFFICIAL	§	
CAPACITY AS THE TEXAS SECRETARY	§	
OF STATE and STEVEN C. McCRAW, IN	§	
HIS OFFICIAL CAPACITY AS THE	§	
DIRECTOR OF THE TEXAS	§	
DEPARTMENT OF PUBLIC SAFETY,	§	
Defendants.	§	

**AFFIDAVIT OF EITAN HERSH**

STATE OF Massachusetts	§
	§
COUNTY OF Suffolk	§

After being duly sworn, Eitan Hersh did upon oath, say:

1. "My name is Eitan Hersh. I am of sound mind, capable of making this affidavit, over the age of 18, and personally acquainted with the facts stated in it, which are true and correct.
2. I personally authored a report titled, "Report on Updating Voter Registration Records with Data from Online Motor Vehicle Transactions" on April 15, 2017, and authored an amended version of that report on May 25, 2017.
3. The report includes my opinion as well as the facts and reasoning on which my opinion is based.
4. I attached as Exhibit A to the report my current curriculum vitae (CV). My CV lists my relevant employment, education, publications, and previous consulting work, all of which informed my opinions in the report and contributed to my competency to testify on the matters at issue in this case.



5. I attached as Exhibit B to the report a list of all of the materials I reviewed in forming my opinions.
6. I attached as Exhibit C to the report a list of my non-academic published writing from the previous 10 years.
7. I hereby incorporate by reference my amended report as well as Exhibits A, B, and C of the report as Exhibit 1, and swear that the contents of the report are true and correct.
8. I, Eitan Hersh, under pains and penalties of perjury under the laws of the United States of America, swear I am capable of making this declaration and that the foregoing statement is true and correct to the best of my knowledge."

  
\_\_\_\_\_  
Eitan Hersh

5/30/17  
\_\_\_\_\_  
Date

SWORN TO and SUBSCRIBED before me on this the 30 day of May 2017,  
2017, in witness whereof I put my signature and seal of office.

Notary Public  
JOAN L. SOLOMONT  
Notary Public  
COMMONWEALTH OF MASSACHUSETTS  
My Commission Expires  
February 1, 2019  
My commission expires

Dated: May 30, 2017

JOAN L. SOLOMONT  
Notary Public  
COMMONWEALTH OF MASSACHUSETTS  
My Commission Expires  
February 1, 2019